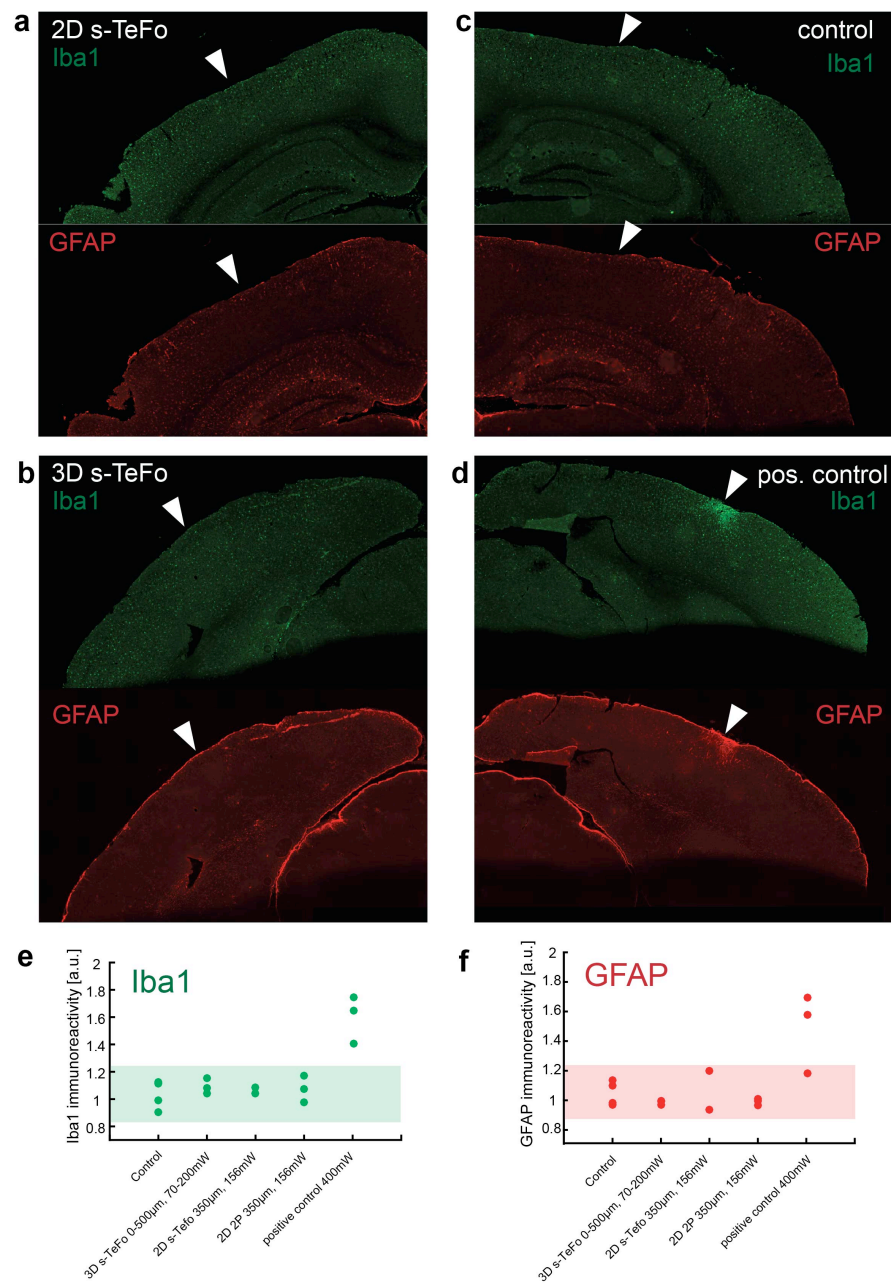


Supplementary Figure 3



Supplementary Figure 3

Immunohistochemical assessment of photo-induced damage.

Representative images of brain sections containing the laser scanned regions that were immunostained with antibodies to detect microglial (anti-Iba1; green) and astrocyte (anti-GFAP; red) activation. All brains (with the exception of control) were illuminated for continuous 20min under the condition stated below. Arrows indicate the approximate center of imaging site. **(a)** Immunolabeled sections of a mouse brain imaged with 2D s-TeFo scanning at 350µm depth with 220 mW effective average laser power. Condition is similar to Fig. 2e. **(b)** Same as in **a**, but with 3D s-TeFo from 0-500µm depth and 70-200mW cycled averaged laser power. Condition is the same as in Fig. 4. **(c)** Control group that underwent window surgery but was not exposed to laser illumination. **(d)** Positive control group that was subject to 2D s-TeFo at 200µm depth and high laser power (400mW). **(e,f)** Intensity of immunolabeling, as fraction compared to control area, for mice illuminated with different laser intensities and scanning modalities, as indicated. 2P – standard two-photon microscopy.